

IN THE CLAIMS:

Please amend claims 1-21 as follows:

1. (currently amended) A belt conveyor comprising:

a conveying upper run ~~presenting~~ (41) including:

a feed end (41a); and

a discharge end [[,]] (41b); and

a return lower run [[,]] (42); and ~~characterized in that the conveying upper run comprises~~

a curved extension (43), which is concave and ascending and ~~presents~~ includes:

an inlet lower portion (43a) and

an outlet upper portion (43b) [[,]] ~~the latter~~ ending at the discharge end (41b) of the conveying upper run (41), ~~where~~

wherein the belt conveyor imparts to the material [[a]] an ascending curved path that is substantially coplanar and opposite in relation to that imparted to the material in the inlet portion (43a), ~~said the~~ the ascending curved path presenting a curvature so as to produce, on the material conveyed at a determined belt speed, a centrifugal force sufficient to maintain ~~said the~~ the material seated against the curved extension (43) of the conveying upper run (41), until reaching the discharge end (41b).

2. (currently amended) The belt conveyor according to claim 1, ~~characterized in that~~ wherein the curved extension (43) presents a single radius of curvature.

3. (currently amended) The belt conveyor according to claim 1, ~~characterized in that~~ wherein the curved extension (43) presents an upwardly decreasing radius of curvature.

4. (currently amended) The belt conveyor according to claim 1, ~~characterized in that~~ wherein the curved extension (43) has its material support face presenting opposite marginal portions (43c), each seated on at least one respective support roller (44).

5. (currently amended) The belt conveyor according to ~~any one of claims 1-5,~~ ~~characterized in that~~ claim 1, wherein the conveying upper run (41) further ~~comprises~~ includes:

a linear extension (45) arranged immediately downstream of the feed end (41a) and ending in the inlet portion (43a) of the curved extension (43).

6. (currently amended) The belt conveyor according to claim 5, ~~characterized in that~~ wherein the linear extension (45) presents an inclination at maximum equal to a limit slope value for a belt conveyor.

7. (currently amended) The belt conveyor according to claim 4, ~~characterized in that~~ wherein the material support face is seated, in each respective marginal portion (43c), on a corresponding support roller (44) whose radius of curvature defines the radius of curvature of the curved extension (43).

8. (currently amended) The belt conveyor according to claim 4,  
~~characterized in that~~ wherein the material support face is seated, in each respective  
 marginal portion (43c), on a plurality of support rollers (44).

9. (currently amended) A crushing unit, comprising:  
 a first belt conveyor (10) ~~conducting~~ ; and  
a second belt conveyor (40);  
wherein the first belt conveyor (10) conducts bulk material (M) to a  
 classifying screen (20) whose discharge of rejected large material feeds a crusher (30),  
 which releases the crushed material to a second feed end (41a) of the a second conveying  
 upper run (41) of ~~[[a]]~~ the second belt conveyor (40) ~~[[,]]~~ ; ~~constructed as defined in any~~  
~~one of the claims 1-6, having the~~

wherein the second belt conveyor (40) includes:

a second conveying upper run (41) including:

the second feed end (41a);

a lifted discharge end (41b);

a return lower run (42); and

a curved extension (43), which is concave and ascending

and includes:

an inlet lower portion (43a) and

an outlet upper portion (43b) ending at the  
discharge end (41b) of the second conveying upper run (41).

wherein the second belt conveyor (10) imparts to the material an ascending curved path that is substantially coplanar and opposite in relation to that imparted to the material in the inlet portion (43a), the ascending curved path presenting a curvature so as to produce, on the material conveyed at a determined belt speed, a centrifugal force sufficient to maintain the material seated against the curved extension (43) of the second conveying upper run (41), until reaching the discharge end (41b); and

wherein the lifted discharge end (41b) ~~for discharging~~ discharges the crushed material to a first feed end (10a) of the first belt conveyor (10), ~~characterized in that~~

wherein the first belt conveyor (10) has ~~[[a]]~~ the first feed end (10a) positioned in ~~[[a]]~~ the curved extension (43) of the second belt conveyor (40) ~~[[,]]~~; and

wherein the first belt conveyor (10) ~~being~~ is vertically disposed above the second belt conveyor (40).

10. (currently amended) The crushing unit according to claim 9, ~~characterized in that~~ wherein the first belt conveyor (10) is parallel and vertically aligned in relation to the second belt conveyor (40).

11. (currently amended) The crushing unit according to claim 9, ~~characterized in that it is~~ wherein the first and second belt conveyors are mounted on a vehicle chassis V.

12. (currently amended) The crushing unit according to claim 9, ~~characterized in that~~ wherein the curved extension (43) has ~~[[its]]~~ a material support face presenting opposite marginal portions (43c), each seated on at least one respective support roller (44).

13. (currently amended) The crushing unit according to claim 12, ~~characterized in that~~ wherein the second conveying upper run (41) further ~~comprises~~ includes:

a linear extension (45) arranged immediately downstream to the feed end (41a) and ending in the inlet portion (43a) of the curved extension (43).

14. (currently amended) The crushing unit according to claim 13, ~~characterized in that~~ wherein the linear extension (45) presents an inclination at maximum equal to a limit inclination value for ~~[[a]]~~ the second belt conveyor.

15. (currently amended) The crushing unit according to claim 14, ~~characterized in that~~ wherein the material support face is seated, in each respective marginal portion (43c), on a corresponding support roller (44), whose radius of curvature defines the radius of curvature of the curved extension (43).

16. (currently amended) The crushing unit according to claim 9, ~~characterized in that~~ wherein the first conveyor (10) has ~~[[its]]~~ the first feed end (10a) affixed internally and eccentrically in relation to the support rollers (44).

17. (currently amended) The crushing unit according to claim 15, ~~characterized in that~~ wherein each of the support rollers (44), which defines the radius of curvature of the curved extension (43), is mounted to a respective shaft that is externally journaled to the adjacent side of the second belt conveyor (40).

18. (currently amended) The crushing unit according to claim 15, ~~characterized in that~~ wherein the support rollers (44) which define the radius of curvature of the curved extension (43) are mounted to a common single shaft, with the ends external to the respective opposite sides of the second belt conveyor (40) resting on respective bearings.

19. (currently amended) The crushing unit according to claim 18, ~~characterized in that~~ wherein the first conveyor (10) has ~~[[its]]~~ the first feed end (10a) mounted around a roll (R) disposed internally and coaxially in relation to ~~said~~ the support rollers (44).

20. (currently amended) The crushing unit according to claim 19, ~~characterized in that~~ wherein the roll (R) of the feed end (10a) is incorporated in a single piece to ~~said~~ the support rollers (44).

21. (currently amended) The crushing unit according to claim 19, ~~characterized in that~~ wherein the roll (R) of the feed end (10a) is supported on the common end of the two support rollers (44), and supported internally to ~~the latter~~ one of the two support rollers (44).